CIS 410/510: Project #7A
Due November 13th, 2013
(which means submitted by 6am on November 14th, 2013)
Worth 8% of your grade

Assignment:
1) Download file proj7.vtk.
2) You will write a VTK program. The program should have one render window & 4 renderers, in a 2x2 layout.
   a. Renderer #1 should cover viewpoint X:0->0.5, Y: 0->0.5. It should contain an isosurface of the variable hardyglobal with isovalues 2.5 and 5.0. You can color this however you like.
   b. Renderer #2 should cover viewpoint X:0->0.5, Y:0.5->1.0. It should contain three slices of the variable hardyglobal, with the three slices at X=0, Y=0, and Z=0. It should use the rainbow colormap, which is the default colormap.
   c. Renderer #3 should cover viewpoint X:0.5->1.0, Y:0->0.5. It should contain hedgehog glyphs of the variable grad. You can choose the density and colors
   d. Renderer #4 should cover viewpoint X:0.5->1.0, Y:0.5->1.0. It should contain streamlines of the variable grad. Use RK4 for integration. The seed locations should be in a line from (-9, 0, 0) to (9, 0, 0). There should be 19 total seeds, meaning they should cover each integer.
3) Email me (hank@cs.uoregon.edu) your source code and a screenshot of it working.

Note #1: do not use your modules for streamlines or isosurfacing. Everything should be done with VTK modules.
Note #2: it is OK to use VTK+Python for this assignment if you want.